



>>Entry Name: Diphenyl selenide

Synonym(s): 1,1'-Selenobisbenzene, 9Cl. Phenyl selenide, 8Cl

CAS Registry Number: 1132-39-4

SePh₂

Molecular Formula: C₁₂H₁₀Se

Molecular Weight: 233.171

Accurate Mass: 233.99477

Percentage Composition: C 61.81%; H 4.32%; Se 33.86%

Use/Importance: Reagent for synth. of oxiranes from nonenolizable carbonyl compds.

Physical Description: Liq. (needles on cooling)

Melting Point: Mp 2.5°

Boiling Point: Bp 301-302°. Bp₁₀ 159°

Density: d²⁵ 1.323

Hazard & Toxicity: LD₅₀ (rat, orl) 360 mg/kg

>>Derivative: Se-Oxide

Synonym(s): Diphenyl selenoxide. 1,1'-Seleninylbisbenzene, 9Cl. Phenyl selenoxide, 8Cl

CAS Registry Number: 7304-91-8

Molecular Formula: C₁₂H₁₀OSe

Molecular Weight: 249.17

Accurate Mass: 249.989685

Percentage Composition: C 57.84%; H 4.05%; O 6.42%; Se 31.69%

Use/Importance: Oxidising agent. Used as a 20% soln. in CH₂Cl₂ for extraction-photometric detn. of Rh

Physical Description: Cryst. (C₆H₆)

Melting Point: Mp 112.8°

Solubility: Sol. EtOH, C₆H₆, CHCl₃

Other Data: Ir ν_{SeO} 823 cm⁻¹ (KBr)

>>Derivative: Se,Se-Dioxide

Synonym(s): 1,1'-Selenonylbisbenzene, 9Cl. Diphenyl selenone

CAS Registry Number: 10504-99-1

Molecular Formula: C₁₂H₁₀O₂Se

Molecular Weight: 265.17

Accurate Mass: 265.9846

Percentage Composition: C 54.35%; H 3.80%; O 12.07%; Se 29.78%

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 154-155°

References:

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